

JOINT TARGETING AND THE JOINT TARGET COORDINATION BOARD: Let's Fix the Current Doctrine!

A Monograph
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ABSTRACT

JOINT TARGETING AND THE JOINT TARGET COORDINATION BOARD: LET'S FIX THE DOCTRINE! by MAJ Charles W. Johnson, USAF, 50 pages.

This monograph discusses joint operational targeting and the Joint Target Coordination Board. Neither concept is new to the US military, but joint doctrine has recently included specifics of the Joint Target Coordination Board. The question is, are the specifics of the JTCB doctrine adequate for commanders and staff planners? The important aspects of the JTCB are threefold; they include where the board should fit in the command structure, when it should enter the target planning cycle, and where the most appropriate staff is located to support the JTCB.

To assess the doctrine, the monograph first reviews two historical case studies. The two case studies are the Southeast Asia War during the Rolling Thunder Campaign 1965-1968, and the Gulf War 1990-1991. Each case study looks at the theater command architecture, the theater joint targeting system, and the issues involved with joint targeting. There is a comparison of the issues from both studies at the end of the Gulf War case.

The monograph then reviews current JTCB doctrine. This section reveals that current JTCB doctrine, as written, can either hurt or help the joint targeting process, depending on how it is implemented. Finally, the concluding section of the monograph offers recommendations on how the current doctrine can be changed to best facilitate joint operational targeting. The recommendations specify where the JTCB should fit in the joint command structure, when it should enter the planning cycle, and where the most appropriate staff is located to support it.

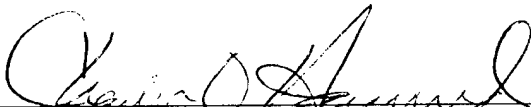
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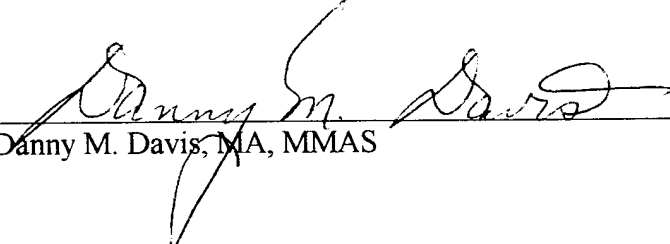
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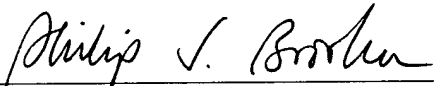
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I. Introduction

The continuous improvement of aircraft capabilities has affected the practice of operational art as much, if not more, than any other technology that has been introduced this century. Airpower's ability to concentrate combat power at any point in the theater has allowed commanders to shape the whole theater -- not just the tactical battlefield -- in ways that nineteenth century commanders never envisioned. During the twentieth century, military commanders found that the aircraft made an excellent addition to the combined arms team on the tactical battlefield. Aircraft could destroy enemy forces before they could make contact with friendly forces. Further, they could interdict enemy lines of communication and even attack enemy political power bases deep in the enemy's rear. This aspect of airpower gave the joint force commander a new set of choices to make. He had to determine where to concentrate available airpower and when to shift emphasis from strategic to operational to tactical targets (or vice versa). The joint commander had to articulate his emphasis for the air plan to all his components.

Answers to those operational questions could be based on broad and theoretical concepts. In theory, answers are hard enough to determine. Finding answers in real life becomes more difficult. The solutions tend to be specific to the situation in which the planners and commanders find themselves. Even so, divergent opinions have arisen on the proper way to focus the tremendous capabilities of airpower. And, as with any asset that has theater-wide reach and flexibility, there is competition for the finite number of sorties that airpower can provide. These divergent opinions tend to align themselves with the different levels of command responsibilities or military service. Certainly, the

joint force commander prioritizes missions and objectives for all the components.

However, within the broad guidance provided by the CINC, there are usually different paths available to achieve the required end. This is particularly true with the application of airpower.

Although there are many facets of the joint application of airpower, this paper will only examine theater targeting with aircraft. Pure close air support (CAS) targets are relatively easy to define. They involve attacks on enemy forces that are in close proximity to friendly troops. Strategic targets are also relatively easy to define. Strategic targets are usually the enemy's government, or command and control facilities that allow that government to direct its armed forces. Strategic attacks can also be made against the enemy's strategic weapons systems or production sites. Between these two extremes, however, lie operational targets. CAS targets are those that are close to friendly forces, but the definition becomes blurred when second or third echelon enemy forces are considered. Strategic enemy resources such as fuel storage sites at the enemy capitol or at another port city are also worthy targets. These, in turn, need to be weighed against the enemy transportation system. Destroying enemy bridges, railroads, and road systems could also help attrit enemy forces. Since there are never enough aircraft to attack all the possible targets, the joint force commander (JFC) and his components must develop a targeting plan that will aid the operational scheme of maneuver.

Some system, usually ad-hoc vice formally created, has been used to facilitate this process. Currently, the US military joint doctrine uses the Joint Target Coordination Board (JTCB) to do this. The placement of this JTCB is not dictated by joint doctrine.

By examining the issues that affected the operation of the joint targeting process in two wars, it is possible to determine the best placement of the JTCB in the joint command structure, what its specific function should be in relation to the planning cycle, and where the most appropriate staff is located to support it. This paper should reveal to future joint staff officers the issues that surround joint targeting and offer a recommended solution. After all, each future situation will be different - both politically and militarily - but the issues that surround joint operational targeting may remain the same.

Sections II and III of the paper will be an examination of two case studies. The two case studies are the Southeast Asia War during the period of the Rolling Thunder campaign 1965-1968, and the Gulf War, 1990-1991. Each case study will be examined in three areas. The first area of examination will be the command structure in which the joint targeting took place. This will show how the aircraft were actually controlled. Secondly, the joint targeting system will be examined for each case. This should help reveal where in the command structure the joint targeting took place, and where it entered the planning cycle. Finally, the issues that surrounded the joint targeting will be examined. Section II will conclude with a short review of the Southeast Asia case. Section III will conclude with a review of the Gulf War case and a comparison of the two studies. Section IV of the paper will review the current joint doctrine on Joint Target Coordination Boards. This will examine where joint doctrine places the JTCB in the joint command structure, what joint doctrine says about the JTCB's specific role, and what joint doctrine says about the JTCB's role in the planning cycle. Furthermore, this section will compare the current doctrine on JTCBs with the two case studies. The

concluding portion of the monograph, section V, will make recommendations on how current JTCB doctrine can be changed to better support joint force commanders and staffs in conducting operational targeting.

II. Southeast Asia Case Study

Command Structure in Southeast Asia

By 1965, commanders at Pacific Command (PACOM) and the Joint Chiefs of Staff (JCS) had determined that Military Assistance Command, Vietnam (MACV), would remain a sub-unified command subordinated to PACOM. The sub-unified command of MACV included only a small geographic area within Southeast Asia (SEA) and other headquarters at Pacific Command would, throughout the war, have much to say about how MACV was supported, particularly with air power.

As a sub-unified command of PACOM, MACV was on the same level in the theater architecture as the two primary components of PACOM. These two primary components were Pacific Air Forces (PACAF) and Pacific Fleet (PACFLT). MACV, PACAF, and PACFLT were all commanded by four-star flag officers.

MACV's geographic area within Southeast Asia was comparatively small. It included primarily the land, airspace, and territorial waters of the Republic of South Vietnam. The commander of MACV, General Westmoreland, received permission to conduct air strikes within his Area of Responsibility, and portions of North Vietnam and Laos that he felt were within his areas of interest.¹ Much of the air power that General Westmoreland could have used to shape his battle did not belong to him, but rather to

CINCPAC. Correspondingly, much of the territory in North Vietnam was not "his" to target.

Not surprisingly, the control of air power within Southeast Asia was equally convoluted. The responsibility for the air war in the north went to Commander-in-Chief of PACOM (CINCPAC), who divided the effort between PACAF and PACFLT. The CINC, Admiral U.S.G. Sharp, determined which component would be assigned missions. If the missions went to PACFLT, the component commander in turn relayed them to 7th Fleet. 7th Fleet then detailed the missions to its subordinate Task Force (TF) 77 for execution.² The Air Force side of targeting was similar.

The PACAF missions for the air war in the north were more confusing due to the Air Force command relationships. Once assigned the missions from Admiral Sharp, PACAF then assigned the missions to 7th Air Force. Even though 7th AF was the air component to MACV, the 7th AF commander could use 7th Air Force assets in South Vietnam to fulfill PACAF's missions or task 13th Air Force wings stationed in Thailand to carry them out.³ Tactical fighter aircraft were not the only assets with confusing command arrangements.

The control of the strategic B-52 bombers, no matter where they attacked in Southeast Asia, was by neither MACV nor PACOM. Rather, the B-52s remained under control of the commander of Strategic Air Command (SAC), headquartered at Offutt Air Force Base in Nebraska. SAC delegated their use in the Southeast Asian theater to its Eighth Air Force, and staged the bombers on the island of Guam.⁴ Although extensive and effective measures were taken to coordinate the B-52 efforts with MACV, 7th Air

Force, and PACOM, the heavy bombers remained assigned to their specified command which reported directly to the JCS.

Even within MACV itself, there was no real centralized control of air power under the MACV air component. 7th Air Force directly controlled Air Force strike aircraft based in South Vietnam and could task 13th Air Force assets based in Thailand. Due to political considerations, aircraft from Thailand had to first land in South Vietnam before being used in South Vietnam.⁵ 7th Air Force could also request air strikes for MACV from TF-77 located in the Gulf of Tonkin. The aircraft from the Navy remained under control of PACFLT, however.⁶ Finally, not until 1968 did the Marine aircraft from III Marine Amphibious Force (MAF) come under the control of MACV's air component commander.⁷ The III MAF stuck to the Marine Corps doctrine that Marine Corps aviation resources were organic to the MAF and would be commanded and directed in support of tactical operations as designated by the senior Marine ground commander. With these kinds of command arrangements, the theater targeting had little hope of being cohesive.

Joint Targeting in Southeast Asia

The review of the command structure in Southeast Asia shows that there were actually two targeting structures. One included most of North Vietnam, and the other included South Vietnam and portions of Laos and North Vietnam.

CINCPAC, as theater commander, was responsible for targeting in North Vietnam during the bombing campaigns. Targets for North Vietnam were nominated by 7th Air Force through PACAF to PACOM. Targets for North Vietnam were also

nominated by TF-77 through 7th Fleet, then through PACFLT to PACOM.⁸ Obviously, each headquarters reviewed and modified the nominations, but CINCPAC had the final authority. It was at this point in the targeting process that the often cited political involvement came into play.

Unlike theater commanders in previous conflicts, who were generally given broad guidance and general restrictions, the targets selected by the theater commander for North Vietnam had to be approved in Washington. The Johnson administration was intimately involved in the targeting process.⁹ Each Tuesday President Johnson and his civilian advisors would review and approve target selections.¹⁰ To make it to the Tuesday meetings, CINCPAC's target selections were first submitted to the JCS, who then submitted them to the Secretary of Defense McNamara. Colonel Henry H. Edelen, an air staff officer at the time, recalled that seven days (Tuesday to Tuesday) wasn't enough time to staff CINCPAC's target proposals. Because of this the CJCS, General Wheeler, organized a team of two officers, one Army and one Navy in the Pacific Division of the Joint Staff. Neither was a pilot; however, together they reviewed the targeting proposals coming from CINCPAC and made suggestions to Wheeler. Wheeler, then, time permitting, reviewed them with the rest of the JCS, or sent them directly to Secretary McNamara prior to the Tuesday meetings.¹¹

This process at the national level was no doubt frustrating to Admiral Sharp, but it may not have been as restrictive as it appears. On 25 August, 1967, Secretary of Defense McNamara testified before congress on the conduct of the war. In that session McNamara stated that all but 57 of 359 targets had been approved and attacked in North

Vietnam (approximately 85 percent).¹² Of the 57 not approved, the service chiefs themselves acknowledged seven to be of limited value; nine were small petroleum facilities accounting for less than six percent of North Vietnam's remaining storage capability; 25 were nonpetroleum targets of lesser importance in heavily defended areas, which were not, in Secretary McNamara's judgment, worth the loss of American lives that would result from the attacks. Five lay too close to China; and the final 11 were still on the table.¹³ Frustration aside, the administration was simply approving or disapproving specific targets from Admiral Sharp's targeting plan. Admiral Sharp was still the engineer of the overall target plan.

The execution of this targeting plan for North Vietnam took place between 1965 and 1968 in a campaign code named Rolling Thunder. As the targets were approved from Washington, CINCPAC would delegate them to his two components for execution. The components, PACAF and PACFLT would further delegate targets to 7th Air Force and TF 77 for execution. Needless to say, there was bound to be friction between two organizations who were responsible for carrying out execution in the same geographic area. The solution was the Route Package system.

As the Rolling Thunder air campaign started in March of 1965, CINCPAC designated the commander of PACAF to be the coordination authority. However, it was also made clear that the controlling authority (PACAF) would not have operational control of TF-77 aviation assets.¹⁴ CINCPAC also established the Rolling Thunder Armed Reconnaissance Coordinating Committee to coordinate and resolve issues between the Navy and the Air Force. The committee name was later changed to the

Rolling Thunder Coordination Committee, but the concept remained the same. It was intended to reduce duplication of effort, eliminate overlapping areas of interest and promote an effective air campaign.¹⁵ While the concept was easy, it was harder to implement.

7th Air Force in South Vietnam took the lead in this coordination effort and the committee considered various options. A primary consideration for TF-77 was the range of its aircraft without refueling. Accordingly, sharing the whole country and dividing it only by time slots meant that the Navy couldn't have attacked the western part of North Vietnam without refueling. Another idea discounted by the committee was that of dividing the country along a north-south line. This system would have applied too much effort (primarily by the Air Force) to the western side of the country while most of the targets were in the eastern part.¹⁶ It was equally unacceptable.

The solution finally agreed to by the committee was to divide North Vietnam into six geographical areas called route packages. The northeastern one contained most of the targets, both Hanoi and Haiphong, and was most heavily defended. Accordingly, route package six was divided roughly equally along a northeast-southwest rail line. The northern area became Route Pack VIA while the southern was named VIB. Route packages II, III, IV and VIB were assigned to TF-77 and V and VIA were assigned to 7th Air Force.¹⁷ While the route package division sounds lopsided in favor of TF-77, the geographical areas between the Navy and Air Force were roughly equal, as were the types of missions.

The Rolling Thunder Coordination Committee and the route package system was not a targeting system for the air war in the North. Targeting was done by CINCPAC, where it rightfully belonged. The route package method was simply an execution system with geographic fire control measures. Although it was technically possible to coordinate actions by TF-77 and 7th Air Force on the same target at the same time, it was rarely accomplished.¹⁸ The geographical route package system became so entrenched on the executors that the full weight of theater fires (air power in this case) was rarely brought to bear.

The second targeting system in Southeast Asia was better organized, and slightly less politically supervised than targeting in the north. In the case of the subunified command of MACV, General Westmoreland retained control for targeting within his area of responsibility. His air component did not actually control navy assets from TF-77, but generally received support from the Navy in South Vietnam.

In this targeting system General Westmoreland, as a subunified commander, directed targeting *within his AO* to his component commanders. The air component staff, because of its broad coordinating ability, then worked out the specifics of coordination with organic air forces, TF-77, Strategic Air Command bombers, and ground army forces.

There were successes within MACV itself and the portions of Laos and North Vietnam General Westmoreland was allowed to target. As North Vietnamese forces built in the southern portions of North Vietnam in 1966 and 1967, Westmoreland and his components developed a targeting system for striking infiltrating units and neutralizing

enemy base camps. This system was known as seeking, locating, annihilating and monitoring (SLAM). Under this concept, MACV's air component commander marshaled the entire spectrum of heavy fire support -- B-52s, tactical air, and naval gunfire -- in close coordination with artillery and other ground fire.¹⁹ First of all, reconnaissance aircraft and other intelligence means fixed and defined the targets. Then, normally, B-52s struck followed by tactical air, naval guns and artillery. After that, long range reconnaissance patrols assessed the damage.²⁰ *Within MACV's specific AOR*, this targeting technique was successful. There were other examples as well.

An equally good targeting system was developed around Khe Shan, when North Vietnamese regular forces besieged the Marines. General Westmoreland and his components set up an intelligence gathering and targeting structure that was theater wide. It included anti-aircraft artillery (AAA) suppression, airlift, and airborne control of tactical air assets.²¹ Using both old and new techniques of prisoner of war documents, interrogations, air and ground based infrared detection means, and radio direction finding technology, they were able to pinpoint every company and battalion of the two division North Vietnamese Army force that was deployed.²² More importantly, they were successfully targeted.

Those successes in targeting, it must be remembered, were in MACV's area of operations. The commander of MACV had no authority to target deeper into LAOS, Cambodia, or North Vietnam. Although General Westmoreland urged his supervisors for air strikes against the rail system and other "lucrative" targets near Hanoi and Haiphong, they were out of his jurisdiction.²³ General Westmoreland also asked for authority to

take such countermeasures as air and ground reconnaissance in Cambodia, to include raids by ground and air forces -- including B-52s -- against confirmed enemy bases, and air and artillery strikes against enemy weapons firing from across the border in Cambodia.²⁴ Again, enemy actions from these areas were affecting his specific area of operations, but they were out of his targeting authority.

As one would expect, tension developed between CINCPAC's targeting system in the north and MACV's in the south. The air war in South Vietnam had to adjust to the need to share its aircraft with operations in North Laos and North Vietnam.²⁵ CINCPAC rarely agreed to cancel Rolling Thunder missions so that General Westmoreland could concentrate more air power in the south. He stated that Rolling Thunder missions were just as important as those General Westmoreland wanted in South Vietnam.²⁶ As the overall commander for the region, CINCPAC got his way. Overall, the tension between targeting in North and South Vietnam reflected deeper issues that affected the various commands and military services in Southeast Asia.

Issues in Southeast Asia Targeting

The first issue with targeting in this case study has to do with command and control. The seemingly disjointed command structures and targeting systems in Southeast Asia did not come about from compromise as much as from fear of losing control of resources. Early in the conflict, the question arose as to whether MACV should be made a unified command, to include all of Southeast Asia, reporting directly to the JCS, or remain as a sub-unified command under PACOM. Obviously, the answer depended upon the position the various commanders held.

Admiral Felt, CINCPAC prior to Admiral Sharp, opposed the establishment of a separate Southeast Asia command because it could split the region from the rest of Asia. In his view, it was necessary that one headquarters be responsible for the entire Pacific theater with sub-unified commands established as necessary in particular areas. Admiral Felt further argued that CINCPAC needed control over all Pacific forces so he could use them as he saw fit to meet any threat. The potential Chinese threat remained very real and CINCPAC wanted to be able to direct forces to counter that threat without debating their use with the JCS.²⁷ Admiral Sharp, Felt's successor, basically agreed. He believed that the war in North Vietnam and Laos should be fought by his two components, PACAF and PACFLT, while the war in South Vietnam should be fought with forces assigned to MACV but supported by PACAF and PACFLT forces located outside South Vietnam. Sharp believed this organization provided flexibility for concentrating his forces in the Pacific against the Chinese should that contingency develop.²⁸ PACOM component commanders tended to agree with their boss.

General Hunter Harris Jr., the PACAF commander, also opposed the establishment of a separate Southeast Asia Command divorced from CINCPAC. The creation of such a command, which would encompass the entire Southeast Asian peninsula, had been included in some of the contingency plans in the event that the US had to take over the war [vice simply assisting the South Vietnamese]. The opportunity costs of this, from the Air Force perspective, would overshadow whatever advantages this might bring. To separate Southeast Asia from the rest of the Asian mainland would divide American forces in the face of the perceived Chinese threat that was common to

Southeast Asia, Taiwan, Japan and Korea.²⁹ The PACAF commander had a wider responsibility than that of MACV, and didn't want to risk having to fight for resources if he needed them elsewhere.

For its part, Strategic Air Command, headquartered in Omaha, Nebraska, resisted attempts to assign its resources to any other command. Its reasons were similar to the reasons voiced in PACOM. Strategists at SAC headquarters were concerned principally with keeping the big bombers armed and ready for world wide strategic attack. They viewed their use in a tactical role as unnecessary and debilitating to the world wide alert posture. Most, in fact, believed that the consequences of losing a B-52 to enemy fire would be serious.³⁰ It would tarnish the invincible image of America's primary nuclear delivery aircraft. Accordingly, CINCSAC, General John Ryan, wanted to return one third of the Guam based aircraft [that were supporting operations in Vietnam] to the states, but was over ridden by the JCS.³¹ This fear of losing control of resources between the various commands and components was not the only reason for the command and targeting structure in Southeast Asia.

The disjointed command structure and targeting system in SEA also reflected the military services' distrust of each other. This distrust was couched in "standard" service arguments, but each service was afraid of losing control of resources to another service which would then proceed to use them incorrectly. The Air Force did everything in its power to avoid giving MACV too much control of Air Force resources. To the Air Force, MACV was an Army command, which would use USAF aircraft only in a support role for ground forces.³² The Navy contended (to the Air Force) that Naval air power was an

inherent part of the fleet and its mission could not be separated.³³ This was in response to Air Force proposals to centralize air operations for North Vietnam under a single [Air Force] commander. The Marines also resisted integration under a single manager for air structure. Their contention was similar to the Navy's in that Marine air was an integral part of Marine operations, and couldn't be assigned to anyone but the Marine ground commander. Only the Air Force advocated a centralized command and control structure for air assets in Southeast Asia.

A final issue in Southeast Asia was that "no notice" changes in the targeting process were hard for the operators to deal with. General Momyer describes an incident during Rolling Thunder that helps show this. As 7th Air Force commander, he was notified of approval for an attack on the North Vietnamese air field of Phuc Yen on 24 October, 1966. Since the targets at Phuc Yen were aircraft, and therefore perishable, General Momyer had to change a previously scheduled mission for that afternoon. This mission necessitated changing bomb loads and briefing the pilots on the attack since they were not familiar with the defenses there.³⁴ Although the strikes were successful, general Momyer felt that he couldn't guarantee such an immediate response in the future.³⁵ These kind of short notice changes were difficult for the personnel who had to execute them in Southeast Asia.

Review of Southeast Asia Case Study

The targeting in Vietnam was very directly related to the command architecture. In this case study MACV was a sub-unified command of PACOM, as were PACAF and PACFLT. This resulted in two targeting systems for Vietnam. One was PACOM's in

North Vietnam and the other was MACV's, primarily in South Vietnam. These targeting systems were not always synchronized.

The first targeting system included most of North Vietnam and northern Laos and was commanded directly by CINCPAC. CINCPAC, in turn, allowed his air and naval components to share the work in executing his targeting plan for Rolling Thunder. The route package system was a measure designed to deconflict PACAF's air force aircraft with PACFLT's navy aircraft. It worked effectively as a deconfliction tool, but made it hard for CINCPAC to bring the full weight of his air assets to bear at one place when that was required. Although CINCPAC's actual target selection for North Vietnam was heavily scrutinized by his superiors in Washington, he was the architect of the targeting plan. His component commanders actively nominated targets, but he packaged them and requested approval from the NCA.

The second targeting system for Vietnam was MACV's and included South Vietnam and small portions of southern North Vietnam and south Laos. CINCPAC generally allowed General Westmoreland freedom to target in his area and supported him with both PACAF and PACFLT aircraft. This worked within Westmoreland's geographical area, but he did not have the freedom to attack outside his area against targets that could affect the fight in his area of operations. General Westmoreland sometimes had to compete with his boss for aircraft assets that CINCPAC wanted to use in North Vietnam. This arrangement left much to be desired vis a vis theater targeting.

The reason for this rather disjointed command structure and dual targeting system had to do with PACOM's fear of losing air assets to MACV. Neither CINCPAC, PACAF

nor PACFLT wanted a unified command in the Southeast Asia area. The potential threat of combat in other parts of the area drove them to this position. If assets were taken from them to form a unified command in Southeast Asia, they would have to fight to get them back in the event combat occurred elsewhere in their area of operation. CINCSAC basically held the same position on the issue of control over his bomber force.

The Army, Navy and Marines were also afraid of losing control of their air resources to another service (namely the Air Force), so they went along with the command and control structure. Each of those services' air arms had developed to fill a service peculiar requirement, and allowing another service to control those assets seemed a less than prudent choice. The result -- disjointed targeting -- was an unforeseen price of each commander's demand for control of his own resources.

The final information gleaned from this case study is that last minute changes to the targeting plan were hard to cope with. Air crews had to be quickly briefed, and their planning time was shortened. Maintenance crews had to quickly change weapons loads. Last minute coordination had to occur, with its accompanying increase in risk. Although the attacks cited in this case study were successful, the commander involved conceded that last minute target changes were very hard to accomplish.

III. Gulf War Case Study

Command Structure in the Gulf War

The 1986 Goldwater - Nichols legislation ostensibly stopped much of the command and control bickering that was so prevalent during Vietnam. The legislation

put the five geographic Commander-in Chiefs (CINCs) in control of all the military forces within their area of responsibility. The Joint Chiefs of Staff (JCS) became an advisory body to the president. The geographic CINCs took their orders directly from the National Command Authority.³⁶

General Norman Schwarzkopf, commander of US Central Command (CENTCOM) as the gulf crisis erupted, became the theater commander. As CINCCENT, he had direct operational command over five components. These included Air Force Component Central Command, (CENTAF); Army Component Central Command, (ARCENT); Marine Component Central Command, (MARCENT); Navy Component Central Command, (NAVCENT); and the Special Operations Component Central Command, (SOCCENT).³⁷ All of the components possessed aircraft, but the deep strike capable ones belonged primarily to the Air Force.³⁸ The Navy and Marines complemented the Air Force in this capability.

During this conflict, General Schwarzkopf centralized the control of all the theater air assets under CENTAF commander Lieutenant General Charles Horner. In his role of Joint Force Air Component Commander (JFACC), Horner was responsible for planning, coordinating, allocating, and tasking, based on the Joint Force Commander's (Schwarzkopf's) decisions for weighting the theater air effort.³⁹ Schwarzkopf could have placed an overall joint force land component commander (JFLCC) between himself and his two primary ground commanders as well. These primary ground commanders were Lieutenant General John Yeasock, Commander of 3rd Army, and Marine Lieutenant General Walter Boomer, Commander of the Marine Expeditionary Force (MEF).

Interestingly, Schwarzkopf elected to retain the role of Land Component Commander in addition to his role as Theater CINC.

This new, untested JFACC concept was not without several challenges. First of all, Schwarzkopf was both the JFLCC and the CINC. This put Horner in the position of having legitimate disagreements with the JFLCC, who also happened to be his direct superior as the CINC.⁴⁰ Secondly, Schwarzkopf as the CINC could direct Horner on targeting issues. He often did this without keeping his subordinate ground commanders informed of his decisions. Not surprisingly, the ground commanders would direct their frustrations at Horner or the Air Force, not knowing the CINC had directed specific targeting to Horner.⁴¹ Finally, the JFACC concept theoretically put the control of all theater air assets under one commander. This concept sat well with the Air Force, who controlled most of the air assets, but not so well with the Army, Marines and Navy. These services had come to rely on their aircraft for their service specific requirements and did not want to relinquish them to a theater air commander. Compromises had to be worked out in each case. Overall, the Gulf War command structure started out and remained centralized -- particularly in the area of deep strike air targeting. The targeting, however, would not be as smooth as the centralized command structure would indicate.

Joint Targeting in the Gulf War

Although the aircraft were centrally controlled, the operational air targeting process for DESERT STORM began quite differently than what would be expected after Goldwater - Nichols. Shortly after the Iraqi invasion of Kuwait, the National Command Authority directed the deployment of Air Forces into Schwarzkopf's CENTCOM region.

After a fast trip to the region, Schwarzkopf left Lieutenant General Horner in Saudi Arabia to supervise the bed down of forces, and act as deputy CINCCENT (forward). Schwarzkopf returned to his CENTCOM Headquarters at MacDill AFB to plan and continue organizing the deployment.

One of the first things Schwarzkopf did when he returned was call the Air Force Chief of Staff. The Air Force Chief, General Mike Dugan, was in Massachusetts at a speaking engagement, so the Vice Chief of Staff, General Mike Loh, took the call. Schwarzkopf related to Loh that CENTCOM had a decent plan for AirLand operations, but he wanted help with planning an air campaign. Schwarzkopf felt that he didn't have that kind of expertise on his staff - people who could think in "those kinds of terms" and "look at a broader set of targets or a strategic campaign."⁴² General Loh was surprised, but quickly agreed to help.

Loh knew that one Colonel John Warden had already begun thinking in such terms. Colonel Warden, whose title was Air Force Deputy for Warfighting Concepts (whose office was more commonly known as "Checkmate")⁴³, had already assembled a team to work on an air campaign due to requests for options from the JCS. General Loh directed Colonel Warden and Warden's boss, Major General Robert Alexander, to put together and brief a strategic air campaign. Loh had promised the option to Schwarzkopf within a week.⁴⁴ Warden and his team continued their work on the campaign.

As directed, Warden's team created and briefed a plan to General Schwarzkopf within the week, but not without a lot of friction within the Air Force itself. The first opposition school of thought in the Air Force was that the Air Staff was messing in

CENTCOM's business. Theater planning was the CINC's purview, and the Air Force would assist by applying equipment and well trained people. This view is represented by Air Force Chief of Intelligence, Major General John Clapper. He was very reluctant to assist Checkmate, and had to be "coaxed" by General Loh.⁴⁵ The second opposing school of thought in the Air Force came, strangely enough, from Tactical Air Command. This command had matured possibly to the premier position in the Air Force, but as its name implied, it dealt primarily with Air Support issues. As TAC planners reviewed the draft air campaign plan, which Warden had named Instant Thunder, there was concern with the plan's apparent lack of integration with the ground forces.⁴⁶ The decision was made by the Air Force Chief to take the briefing straight to Schwarzkopf.⁴⁷ Instant Thunder was primarily a strategic campaign, dealing primarily with strategic targets. That fact would plague the joint targeting process later.

Not only did General Schwarzkopf like the plan, the Chairman of the Joint Chiefs of Staff, General Colin Powell was interested, as well. Powell, however, was concerned that the Instant Thunder plan didn't concentrate enough on destroying the fielded Iraqi military. Additionally, Powell felt he couldn't recommend only a strategic air campaign to the president. After stating his concerns, however, Powell asked the Checkmate team to continue planning and make a 15 to 20 minute version of the briefing for the Secretary of Defense (SECDEF). "...I need about five slides to brief the SECDEF," Powell told Warden.⁴⁸ From that beginning, the blueprint for the Desert Storm air campaign was born.

Instant Thunder was briefed to the SECDEF and then to the President. Again the plan was refined and rebriefed to General Schwarzkopf. Schwarzkopf directed Warden to brief Lieutenant General Horner in Riyadh. Although Lt. General Horner didn't like the Air Staff "messing" in his business, he understood Schwarzkopf's desires. After the briefing in Riyadh, General Horner selected several people from Warden's briefing team to remain in Saudi Arabia. These included Lieutenant Colonels Steve Wilson, Dave Deptula, and Ben Harvy.⁴⁹ Although Warden went home, the intent of the Instant Thunder plan remained intact in theater, in those three people. The Instant Thunder plan grew and flourished. The nuts and bolts of that plan was theater targeting.

The Instant Thunder plan initially had only 84 targets that were developed almost solely by Air Force planners from the Air Staff. As the plan was developed further within CENTCOM and its components, the targets would multiply more than 7 times.⁵⁰ There can be no question, however, that the targeting process was directed by CINCCENT, who initiated and approved the initial Checkmate plan. The objectives of the plan became the JFACC's campaign objectives and consisted of:

1. Isolate and incapacitate the Iraqi regime.
2. Gain and maintain air superiority to permit un-hindered air operations.
3. Destroy nuclear, biological, and chemical (NBC) warfare capability.
4. Eliminate Iraq's offensive military capability by destroying major parts of key military production, infrastructure, and power projection capabilities.
5. Render the Iraqi Army and its mechanized equipment in Kuwait ineffective, causing its collapse.⁵¹

The JFACC specifically defined these objectives in to the following 12 target sets:

1. Leadership/command facilities.
2. Electrical production facilities.
3. Telecommunications and command, control and communications nodes.
4. Strategic integrated air defense system.
5. Air Forces and air fields.

6. NBC research, production, and storage facilities.
7. SCUD missiles, launchers, production and storage facilities.
8. Naval forces and port facilities.
9. Oil refining and distribution facilities.
10. Railroads and bridges.
11. Iraqi army units to include the Republican Guard in the KTO.
12. Military storage and production sites.⁵²

The specific theater targeting with air assets was done through the JFACC's Tactical Air Control Center (TACC). The TACC was the senior part of the Tactical Air Control System and the Air Component Commander's focal point to operational planning, intelligence, logistics and command and control of air operations.⁵³ In this case, the TACC belonged to General Horner, who was CENTAF Commander and JFACC. General Horner's staff was responsible for planning, intelligence and targeting of all theater air assets. It made the Master Attack Plan (MAP) and converted it to an Air Tasking Order (ATO).

A discussion of the intense staff work required to create the MAP and ATO is required here. As the JFACC internal planning document, the MAP consolidated all inputs into a single plan. The first inputs were the CINC's objectives and the target sets, stated above. From that, the staff collated intelligence from a variety of agencies to locate crucial nodes of the target sets. This MAP preparation was constantly deluged with political developments, CINCCENT guidance, target priorities, latest intelligence, and operational factors like weather, threat, and availability of strike assets.⁵⁴ The MAP was a relatively compact document (compared to the ATO) that integrated attack plans and provided theater wide coherency and timing to the days operations.⁵⁵ It had to be "converted" into useable data for the attack assets, however.

The ATO was the specific “how” portion of targeting derived from the MAP, and was even more staff intensive to create. The ATO was a two part document. The first part focused on targeting, mission data, and Electronic Warfare/Suppression of Enemy Air Defense (EW/SEAD) support. The second part included special instruction on topics such as communications frequencies, tanker and reconnaissance support, Airborne Warning and Control System (AWACS) coverage, Combat Search and Rescue (CSAR) procedures, routes into and out of enemy airspace, and a myriad of other details.⁵⁶ No other component at CENTCOM had the magnitude of staff expertise required for such a broad targeting mission.

The DESERT STORM targeting process makes sense so far, but there has to be a method for the ground field commanders to gain access to the process. After all, they also require air attacks to help shape the battlefield pursuant to the orders the CINC has given. This access existed in DESERT STORM, but was perceived by the ground commanders to be ineffective.

In the case of the Army XVIII and VII Corps Commanders, Lieutenant General Gary Luck and Lieutenant General Fred Franks, operational targets were submitted that would help set the conditions for success in their missions. These target nominations were then sent to 3rd Army (ARCENT), where the ARCENT G-2 and G-3 continued the targeting process. The G-2, Brigadier General John Stewart, focused collection assets on the target designated areas supplied by the G-3, Brigadier General Steve Arnold.⁵⁷ The target designated areas included corps commander nominations as well as others required by ARCENT. Next, Stewart’s staff reviewed the collection effort, then developed

potential targets for use in the ATO. Third, Stewart identified high - value targets and then he and Arnold prioritized them in accordance with the commander's guidance. The G-3 then submitted them to the TACC for inclusion in the ATO. After that, Stewart continued to revalidate and confirm the targets to the Air Force until they were struck.⁵⁸

This access that the corps and army commanders had to the targeting process sounds good in theory, but the targets didn't neatly jump into the ATO the way it was perceived (by the Army) that they should. First of all, when ARCENT "racked and stacked" the targets, the corps nominations, at times, got lower priority. To make matters worse, General Schwarzkopf was providing targeting guidance directly to the JFACC, often times with direction that overrode the Army's requests. On occasion, Schwarzkopf would wait until after the next day's ATO was prepared to pick a specific Republican Guard division for attack.⁵⁹ The problem was that the communication back down the Army chain explaining what had occurred was not good.⁶⁰ Horner and the TACC were doing everything they could to meet the CINC's last minute guidance, and the word just wasn't getting down to the field commanders.

The ensuing furor by Marine and Army commanders over targeting was directed at the Air Force. Marine Lieutenant General Walter Boomer, Lieutenant General John Yeosock, and Army Corps commanders Gary Luck and Fred Franks expressed major concern over the apportionment of air power to support their forthcoming attacks into the Iraqi front.⁶¹ Boomer warned of potentially "disastrous consequences" since the Marines believed they were about to attack 40 percent of the enemy in theater with only two divisions. "Who's running the war?" exclaimed Boomer, "Is it the Air Force or the

CINC, you've got to wonder."⁶² Lieutenant General Franks echoed Boomer's sentiments in his agitated calls for help to the Deputy CINC, Lieutenant General Cal Waller. Franks expressed his belief that he was not getting a fair share of his target nominations fulfilled.⁶³ The fervor came to a head with an ARCENT situation report that was transmitted by the ARCENT G-3 on 18 February.

Air support related issues continue to plague final prep of combat operations and raise doubts concerning our ability to shape the battlefield prior to the initiation of the ground campaign. Too few sorties are being made available to VII and XVIII Corps. And while air support missions are being flown against first echelon enemy divisions, Army nominated targets are not being serviced.⁶⁴

The result of this frustration was a move by the army to put some teeth into the Joint Target Coordination Board, which until then, had been the purview of the JFACC staff. There technically had been a JTCB, which included lower ranking members of the various components assigned to coordinate with the air component. The CINC, however, did not meet with the board. As stated before, he affected targeting by speaking directly to the JFACC.⁶⁵ Ten days into the war Army staff officers assigned to represent the army in the TACC explained to the Deputy CINC that there were still frustrations within the army about targeting. Waller was convinced enough to take the matter up with Schwarzkopf. Schwarzkopf listened and appointed Waller the head of the JTCB, with full authority to review the ATO and make inputs.⁶⁶

This was an ad-hoc solution, but it met the minimum needs of all parties concerned. Waller was responsible for prioritizing the targets nominated by ground force commanders. All service components had membership on the board. Waller created a

“DCINC” target list, which was a separate list than the one maintained by Horner for Schwarzkopf. The DCINC list contained targets of special interest to ARCENT and MARCENT.⁶⁷ This gave the ground commanders more of a feeling of having some control over the targeting and kept the Air Force out of the Army’s verbal line-of-fire. It didn’t, however, stop the CINC from making last minute targeting changes. This review of the Gulf War shows that targeting issues emerged as the ground war loomed. And the Gulf War targeting issues are more similar to those of Vietnam than one would first think.

Issues in Gulf War Targeting

The first issue that arises out of the Gulf War case study is that command and control greatly affects the targeting process. Although the air targeting assets were centralized in this case, the centralization was disputed by the various components from the very beginning. The Navy and Marines had more trouble with the concept initially than did the Army. Many Navy officers felt that the JFACC staff was not joint at all, but composed entirely of Air Force personnel. In the Navy’s view, Air Force procedures dominated the air planning and execution to the detriment of the Navy. An Air Force liaison officer to the NAVCENT staff during the war stated that many of the staffers felt that the JFACC concept was an attempt to subordinate one component commander to another and enhance Air Force prestige at the Navy’s expense.⁶⁸ Navy carrier planners had become accustomed to independent, autonomous operations and chafed under the restrictions of General Horner’s control and his tasking designed to separate flights of aircraft and prevent fratricide.⁶⁹ The Navy tended to go along with the concept, however,

because it was really the only way they would get to participate in the joint targeting process.

The Marines also had trouble with the JFACC concept of centralized air control. Both during and after the war, the Marines insisted that JFACC was strictly a coordinator. In fact, Lieutenant General Royal N. Moore Jr., Commander of the Marine Expeditionary Forces (MEF) aviation unit during Desert Shield/Storm, seemed to take great delight in circumventing JFACC control of Marine air operations. Reportedly, the Marines were so adamant about this matter that they addressed their messages for General Horner to the "Joint Force Air Coordinator" just to drive home the point.⁷⁰ Unlike the Navy, the Marines could always use the aircraft for their doctrinal purpose of supporting the Marine ground force. They were going to get to "play" anyway.

The Marines finally refused to allow their aircraft to be put on the ATO. Twelve days into the air campaign, Lieutenant General Walter Boomer directed that Marine aircraft would only attack targets which had an impact on MEF concept of operations.⁷¹ This decree resulted because a previous Air Tasking Order (ATO) had ordered a Marine air strike on a SCUD rocket motor plant near Baghdad.⁷² This was not the targeting focus of the MEF commander. As a further step, twenty days into the air war, he directed that the Marine air wing would only attack targets in front of Marine ground positions.⁷³ Because marine air frames were only a fraction of the theater air assets, General Horner allowed this challenge to his authority to pass.

The second issue concerning joint targeting that arises out of this case study is that there was a perception by other services that the targeting was done by the Air Force,

for the Air Force. On the surface, that perception could be accurate. As stated during the Gulf War case study, the initial planning was conducted almost entirely by the Air Force Checkmate cell. It worked so fast and furiously (under General Schwarzkopf's pressure) that there was very little time to staff the plan through the rest of the Air Force, much less the other services. When Lieutenant General Horner kept three of Colonel Warden's briefers in Riyadh, they formed the nucleus of the Air Campaign Special Planning Group (SPG). With augmentation and leadership by Brigadier General Buster Glosson, this group took on the responsibility for finessing the Instant Thunder plan in CENTCOM. Because of the secret, compartmentalized nature of the planning, this group became known as the "Black Hole". Over time, this unofficial, informal "Black Hole" assumed so much power in the planning process that CENTAF reorganized its plans functions to formalize the role of the "Black Hole."⁷⁴ The field grade liaison officers from the other services to this group were simply overpowered (rank-wise) by Lieutenant General Horner and his deputy Glosson. The other services appeared to be shut out of the planning.

The third issue between the services in this case study was the perception that the Air Force was "bending" the CINC's guidance to get its own way. This perception had some small basis in truth. Lieutenant General Calvin Waller complained that Glosson pretended to cooperate with the Army, but did everything he could to build a case that the strategic air strikes were destroying the Iraqis and sought to go around Waller to Schwarzkopf to sell the Air Force strategy.⁷⁵ In another instance, Glosson redefined the geographic meaning of "downtown Baghdad." After being told that air strikes in down

town Baghdad would only be approved in Washington, Glosson took a map and drew a three mile wide radius around the center of Baghdad and colored it in. This allowed targeting to occur near Baghdad on facilities the "Black Hole" wanted struck, but it obviously wasn't in the spirit of intent of the targeting order to discontinue attacks on Baghdad.⁷⁶ A third example of the Air Force "bending" the rules had to do with allocating reconnaissance assets. The limited availability of the Army's reconnaissance assets made them dependent on air force assets, but the Air Force managed to shave its own requirements "off the top" to support its deep bombing campaign. RF-4C missions diverted to support strategic targeting were not offered up as part of the available pool of reconnaissance assets.⁷⁷ Although these incidents were very isolated when compared to the number of sorties flown during the war, other services could perceive that the Air Force was working for itself.

For the Air Force's part, the command structure allowed them to believe they were doing exactly what the CINC wanted. In January and early February, General Schwarzkopf ran the air war by himself with no one intervening between him and General Horner.⁷⁸ Horner and his staff generally gave the CINC what he wanted to the best of their ability. Schwarzkopf never appears to have communicated his priorities to his field commanders. As a result, they watched the Air Force seemingly ignore their targeting priorities. Moreover, Schwarzkopf short circuited the target board's recommendations, while telling Horner and Glosson directly what they should strike in the KTO.⁷⁹

The fourth issue this case study reveals is that there is a definite staff competency requirement for planning and executing theater air targeting. The MAP and ATO of DESERT STORM were staff intensive products. They provided a host of detailed instructions to air crews and required expertise in weapon systems, threat systems, intelligence, logistics, and weather. In DESERT STORM, the obvious choice for this duty fell to the air component. And while it was the best choice in this case, it helped fuel the perception that targeting was accomplished solely by the Air Force.

Finally, this study showed that short notice changes are usually detrimental to the targeting process. General Schwarzkopf's redirection of targeting the night before the plan was executed represents this fact. At best, missions were delayed. At worst, planned mission were dropped. A short notice change required that the huge effort involved in creating an ATO had to be short circuited. Schedules were changed and weapons downloaded and replaced with more appropriate ones. The last minute changes certainly didn't help the targeting process.

Review of Gulf War and Comparison with Southeast Asia Case Study

A comparison of the Gulf War case study with the Southeast Asia study shows that the theater targeting strategy improved in the gulf over that of Vietnam. This was primarily due to the centralized command and control that was pervasive throughout the Gulf War. There were no sub-unified commands beneath General Schwarzkopf in the Gulf War. This centralized command and control allowed the CINC to prioritize and prosecute a coherent targeting strategy with the support of all his component commanders. Like Vietnam, the most applicable weapons for targeting throughout the

theater were aircraft. Unlike Vietnam, the aircraft were centralized under the control of a single commander for air, or a JFACC.

A closer look at the Gulf War case study shows that there were some similarities with Southeast Asia, as well. One of the similarities between the case studies is that the underlying attitude about centralized control of air resources was still prevalent. In the Gulf War, the Air Force strongly believed in the centralized control of air, while the Navy, Marines, and Army tended to resist it. The Navy felt that it was simply overrun by Air Force procedures and doctrine, and had no say in how targeting was accomplished. It tended to grudgingly put up with the structure when it saw it had to be on the ATO to fight, but didn't agree with the JFACC concept until after the war. The Marines also resisted the centralization of air assets. That service didn't want its strike aircraft used the way the "Air Force" was using them, so it gradually pulled its assets out of the pool of resources available to the JFACC. The result was Marine aircraft in the Marine area of operations, while the Air Force air flew elsewhere, a small microcosm of the route package system in Vietnam. General Horner, the JFACC, had enough other aircraft at his disposal to allow this challenge to his authority to go unchecked. The Army also resisted the JFACC concept when it saw that its target nominations were not being attacked. This was due mostly to a lack of communication to the army field commanders on the CINC's part, but the army didn't know that. To address this perceived problem, the Army convinced the CINC that the JTCB needed to be directed by an officer above the JFACC level. This institutional maneuvering says something about the relationship between

services in the 20 plus years between the end of Rolling Thunder and the start of the Gulf War.

The acrimony during the Gulf War between the commanders of the various services at various levels represents a lack of trust. The specific fear was that the Air Force would not do what the other services -- particularly the Army and Marines -- wanted it to do. While the other services agreed that the Air Force brought a huge amount of targeting capability to the fight, there was a fear that the Air Force, given too much control, would do its own thing and leave the other services in the lurch. Had General Schwarzkopf not centralized it from the beginning, the command and control could have very closely resembled that of Southeast Asia. The similarity of attitudes concerning loss of control have not changed very much.

Another similarity between the two case studies is that last minute specific target changes are hard for the targeting system to cope with. In Vietnam, changes resulted from the National Command Authority releasing targets for attack. In the Gulf War, the changes resulted, in several instances, from the CINC changing the plan (the ATO) the night before it was scheduled to be executed. In both case studies the results were similar. Air crew preparation time was shortened. Maintenance crews had to down load weapons and replace them with more appropriate ones. Hurried, last minute coordination with support assets had to be arranged. And worst of all, previously planned targets were dropped off the schedule to support the changes, forcing those targets to be attacked at a later date.

Finally, a new phenomenon arose out of the Gulf War case study that wasn't readily visible in the Vietnam case study. That phenomenon is this: A centralized air component accrues a large staff. All the experts in air warfare from weapons to weather personnel are required to conduct daily targeting operations. And although the other services must be represented for particular expertise, the air component's staff was the best choice for starting the foundation for that structure. No other staff in the joint structure was better suited to that mission. The same staff functions were required in Vietnam, but the decentralization allowed each component to operate nearly independently. Large staffs like those required of General Horner in the Gulf weren't required in Vietnam.

IV. Current JTCB Doctrine

Five current joint doctrine publications discuss the Joint Target Coordination Board in detail. The publications include JP 1-02, DoD Dictionary of Military and Associated Terms; JP 3-0, Doctrine for Joint Operations; JP 3-56.1, Command and Control of Joint Air Operations; JP 3-04.1, JTTP for Joint Suppression of Enemy Air Defense; and JP 5-00.2, Joint Task Force Planning Guide and Procedures. Even though all the applicable doctrine gives the JFC a choice of convening a JTCB, it does support the formation of one.

Between the five joint publications there is agreement on the various facets of a JTCB. The doctrine agrees on the position of the board in the joint command structure, what its function should be, where it should fit in the planning cycle, and the fact that the

JTCB needs to have, or have access to, a competent joint staff. The doctrine, however, allows the commander choices on each of the above mentioned facets of JTCBs.

Concerning placement of the JTCB, doctrine states that it can either be at the JFC level or delegated to a subordinate command.⁸⁰ JP 5.00-2 is the only applicable publication that stresses it should be at the JFC level.⁸¹ The rest leave it up to the commander as long as every command organization is represented.

In light of the two case studies, the placement of the JTCB appears to be critical in fostering trust. If the JTCB is located above the component level, the impression of fairness may be given to the various commands and components. The distrust between the services was apparent in both case studies. Trust was hard to foster, and distrust was incredibly hard to eradicate. In Southeast Asia, distrust was so prevalent that the command structure and coherent theater targeting system were fractured. The result in Vietnam was two nearly separate targeting systems; one in North Vietnam, neatly divided between the Air Force and the Navy, and another in South Vietnam. This provided very little ability for the commander in the South to target in the North and shape the conditions of his fight. Distrust was still evident in the Gulf War even with centralized command and control. A war of words emerged between components when it was perceived that the Air Force wasn't willing to provide for the requirements of the other components.

Current joint doctrine also agrees on the functions of the JTCB, but again provides choices. Normally, the function should be to review target information, develop targeting guidance and priorities, and prepare and refine joint target lists.⁸² The

first two functions tend to reflect a broader, macro view of the JTCB's function. On the other hand, preparing and developing integrated target lists tends toward the micro nuts and bolts management of targeting efforts by the JTCB.

These two views dovetail into the question of where within the planning cycle the JTCB should fit. To this question, the joint doctrine agrees that the JTCB may be an integrating center to accomplish broad targeting goals or be a JFC level review mechanism.⁸³ The JTCB as an integrating center indicates it performs its function near the front of the planning cycle. The JTCB as a review mechanism implies it is a check of the planning toward the end of the cycle.

If the board is checking the plan at the end of the planning cycle, there is some likelihood that changes will be made. At this point in the planning cycle, these changes actually mean last minute specific target changes. One of the problems with targeting revealed in both Vietnam and the Gulf War was that last minute changes put a strain on the people planning and executing operational targeting. Preparation and coordination time for everyone involved was shortened. This not only increased the risk to individual aircrew members, but also meant targets were dropped from the schedule and had to be reinserted later. Rescheduling later meant that missions had to be replanned. After all, enemy defenses changed, weather changed, and even target location may have changed.

Finally, the current joint doctrine agrees that whoever is given the authority to operate a JTCB needs to possess or have access to sufficient C2 infrastructure, adequate facilities, and ready availability of joint planning infrastructure.⁸⁴ It doesn't state where the staff will come from, however. In Southeast Asia, due to the decentralized

command and control structure, each of the various staffs could cope with the planning requirements of targeting. In the Gulf, however, the size of the air component staff was much larger, due to the magnitude of the forces it was directing. Of all the component staffs in the Gulf War, the air component's was the best suited for planning and executing operational targeting.

The choices current doctrine gives to JFCs concerning JTCBs may alleviate the underlying problems of joint targeting that were discovered in the two case studies. Equally, some of those choices may actually perpetuate operational targeting problems that were evident during both case studies. Revising joint doctrine may help JFCs and their staffs apply a systemic solution to these potential problems.

V. Conclusions

The joint doctrine needs to be more specific on Joint Target Coordination Boards. It can provide greater direction to Joint Force Commanders and their staffs on where the board fits into the joint command structure, what its specific role is in relation to the planning cycle, and where an appropriate planning staff will come from.

First of all, the joint doctrine should specify the placement of the Joint Target Coordination Board at the JFC level and eliminate the option of placing it within a component. This is best accomplished by having a member of the JFC's staff head (or chair) the board. The best choice for this position is an officer of equal rank to the component commanders. The deputy JFC is the best choice. A lesser ranking officer, so designated by the JFC, could perform the function, but that officer would have to possess the moral courage to drive the targeting process in the face of higher ranking component

commanders. In any case, the designated head of the targeting board needs to have the complete backing of the JFC. This should help alleviate most "target squabbling."

Even if the head of the targeting board is above the component level, there is no guarantee that officer will not have an ax to grind. In the Gulf case study, by the time Lieutenant General Waller became the head of the targeting board, his role had become one of 'target adjudicator' between the Army and the Air Force. To the Air Force, it surely looked as if he was carrying water for the Army. On the other hand, had the targeting board been organized from the beginning above the component level and chaired by an officer of at least equal rank to the component commanders, it may have made a difference. A JTCB so organized may have made everyone feel the board was representing primarily the CINC as well as being an honest broker between components. It may also have helped the communication flow. Perceptions of fairness are very important in the joint targeting process.

The next area concerning JTCB doctrine that must be more specific is the board's role and where it enters the planning cycle. The JTCB should make inputs at the beginning of the planning cycle and eliminate the option of having the board operate as a JFC level review mechanism. It seems that if the board has a broad macro-level view of the JFC's overall guidance, and makes its input near the beginning of the planning cycle, the targeting process will be more effective. The various components will have been represented and should at least understand the reasoning for specific targeting actions, even though they may not always agree with them. On the other hand, making inputs near the end of the planning cycle tends to disrupt theater targeting. Boards that

disapprove or change targets when the plan is nearly ready for execution (as joint doctrine currently says it can) put a strain on the system. Planning staffs and everyone else involved in targeting, down to and including the executors, have to quickly adjust. Targeting accomplished at the last minute increases the chances that lethal mistakes will be made. Both case studies indicate that it is hard for everyone to cope with last minute changes.

This is not to say that last minute changes to targeting will not occur under this proposed joint doctrine. The conduct of warfare is incredibly dynamic. This dynamic nature of warfare will always require large military forces to adapt to changing conditions. Nor will rewriting JTCB doctrine stop the joint force commander from making last minute changes. However, "normal" conditions suggest that having the board provide broad target guidance near the beginning of the cycle will help alleviate unnecessary targeting friction and frustration.

Finally, joint doctrine specifies that the JTCB will have access to a staff that possesses sufficient C2 infrastructure, adequate facilities, and ready availability of joint planning expertise. It does not state, however, from where the staff will come. The air component appears to be the most amenable to the requirement. In both case studies, the majority of deep targeting was done with aircraft. Even though additional deep targeting weapons are becoming available to all services, manned aircraft will continue to be the backbone of deep targeting well into the next century.

The air component's staff will have to be augmented during contingencies in order to incorporate other surface and sealaunched deep targeting weapons. It contains

the basic foundation required in the current joint doctrine and already coordinates with all components on a theater wide basis. Having the JTCB at the JFC level and the staff at the component level is not inconsistent. Since the targeting actions of all components will be derived by guidance from the JTCB, their respective staffs will carry out the details. This applies equally to the air component. Short of creating, equipping, and providing personnel for a whole separate JTCB staff, the air component seems like the best place to start.

Readers should remember that the commander *always* has the option of tailoring his command to the specific situation. However, joint staff officers, particularly those charged with organizing a joint force, should have more concrete guidance as they prepare for operational targeting. These recommendations should help create a JTCB that carries out the guidance of the JFC, while treating all components fairly. Additionally, these recommendations should make the targeting process from the initial commander's guidance phase to the execution phase go as quickly and smoothly as possible.

¹ The areas inside Laos were called TIGER HOUND and STEEL TIGER. The area in North Vietnam abutted the South Vietnamese northern boarder and continued into North Vietnam approximately 100 miles. For information on Laos, see William Momyer, Airpower in Three Wars (Maxwell AFB: Air University Press, 1985), 85. For information on General Westmoreland's permission to determine strikes in North Vietnam, see Lt Col John J. Lane, Command and Control and Communications Structures in Southeast Asia (Maxwell AFB: Air University Press, 1981), 65, and William Westmoreland, A Soldier Reports (Garden City NY: Doubleday, 1976) 76.

² Momyer, Airpower in Three Wars, 78.

³ Until early 1966, the predecessor to 7th Air Force was 2nd Air Division. It Worked for 13th Air Force Stationed in the Philippines. Prior to the activation of 7th AF, PACAF tasked 13th AF, and 13th AF then tasked 2nd Air Division. In either case, the MACV air component had the same responsibilities for the war in South and North Vietnam. See Momyer, Airpower in Three Wars, 78-83, and John Schlight, The War in South Vietnam: The Years of the Offensive 1965-1968 (Washington, DC: Office of Air Force History, 1988) 129.

⁴ Lane, Command and Control and Communications, 55.

⁵ Schlight, The War in South Vietnam, 29.

⁶ Westmoreland, A Soldier Reports, 76.

⁷ Momyer, Airpower in Three Wars, 82.

⁸ Lane, Command Control and Communications, 67.

⁹ Mark Clodfelter, The Limits of Air Power, (New York: Macmillan, Inc., 1989), 86.

¹⁰ Ibid., 122.

¹¹ Ibid., 86.

¹² Mark Perry, 4 Stars, (Boston: Houghton Mifflin, 1989), 162.

¹³ Robert S. McNamara and Brian VanDeMark, In Retrospect: The Tragedy and Lessons of Vietnam, (New York: Random House, 1995) 287.

¹⁴ Momyer, Air Power in 3 wars, 90.

¹⁵ Ibid.

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- ¹⁶ These proposals obviously were slanted toward either the Navy or the Air Force. The ideas that were dismissed prior to the route package system are recounted in Momyer, Air Power in Three Wars, 90 - 91, and Lane, Command, Control, and Communications, 65.
- ¹⁷ Momyer, Air Power in Three Wars, 91 - 94.
- ¹⁸ General Momyer describes the problems with quickly coordinating a strike on Phuc Yen airfield with TF-77 in 1967, Air Power in Three Wars 97-98.
- ¹⁹ Westmoreland, A Soldier Reports, 203.
- ²⁰ Ibid., 204.
- ²¹ W. Scott Thompson and Donaldson D. Frizzel, eds., The Lessons of Vietnam, (New York: Crane, Russak, and Co., 1977), 137 - 139.
- ²² Ibid.
- ²³ Guenter Lewy, America in Vietnam, (New York: Oxford University Press, 1978), 377 and Westmoreland, A Soldier Reports, 122 and 261.
- ²⁴ Westmoreland, A Soldier Reports, 181.
- ²⁵ Schligh, War in South Vietnam, 24.
- ²⁶ Ibid., 29.
- ²⁷ Momyer, Airpower in Three Wars, 76.
- ²⁸ Ibid., 78.
- ²⁹ Schligh, War in South Vietnam, 32.
- ³⁰ Ibid., 49.
- ³¹ Ibid., 49-50.
- ³² Momyer, Airpower in Three Wars, 73.
- ³³ Ibid., 90.
- ³⁴ Ibid., 97.

³⁵ Ibid., 98.

³⁶ National Command Authority is the President and the Secretary of Defense.

³⁷ Douglas Craft, An Operational Analysis of the Gulf War, (Carlisle PA: Strategic Studies Institute, 1992), 21 - 23.

³⁸ Edward C. Mann, Thunder and Lightning: Desert Storm and the Air Power Debates, (Montgomery AL: Air University Press, 1995), 80.

³⁹ James A. Winnefeld and Dana J. Johnson "Unity of Control: Joint Air Operations in the Gulf", Joint Force Quarterly, Summer 1993, No. 1), 92.

⁴⁰ Mann, Thunder and Lightning, 56.

⁴¹ Ibid.

⁴² Richard T. Reynolds, Heart of the Storm, (Maxwell AFB, AL: Air University Press, 1995), 24.

⁴³ Checkmate is a unique directorate in Air Force Plans, and is known for encouraging independent thinking and analysis on important combat employment issues. See James A. Winnefeld, Preston Niblack, and Dana J. Johnson, League of Airman: U.S. Air Power in the Gulf War, (Santa Monica, CA: RAND, 1994), 16.

⁴⁴ Reynolds, Heart of the Storm. 24 - 27.

⁴⁵ Ibid.

⁴⁶ Reynolds, Heart of the Storm, 40, and Winnefeld, A League of Airmen 68.

⁴⁷ Reynolds, Heart of the Storm, 50.

⁴⁸ Ibid., 74.

⁴⁹ Ibid., 129.

⁵⁰ Maj John Hunter, Joint Operational Targeting: Who's in Charge; CINC, JFACC, or JTCCB, (Ft Leavenworth, KS: School of Advanced Military Studies, 1994), 28.

⁵¹ United States Department of Defense, Conduct of the Persian Gulf War: Final Report to Congress, Vol 1 (Washington, DC: Department of Defense, April 1992), 125 - 126.

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- ⁵² Ibid., 126 - 130.
- ⁵³ Paul Thompson, "Command, Communication and Control (C3) of Air Assets in Theater Warfare", Conventional Warfare, September 1989, 89 - 96.
- ⁵⁴ Conduct of the Persian Gulf War, 136.
- ⁵⁵ Ibid., 137.
- ⁵⁶ Ibid.
- ⁵⁷ Brigadier General Robert H. Scales, Jr., Certain Victory: United States Army in the Gulf War, (Washington, DC: Office of the Chief of Staff United States Army, 1993), 178 - 179.
- ⁵⁸ Ibid.
- ⁵⁹ Scales, Certain Victory, 180.
- ⁶⁰ Eliot A. Cohen, director, Gulf War Air Power Survey, Vol II, Operations Effects and Effectiveness, (Washington: Department of the Air Force, 1993), 268. (Referred to as GWAPS from this point forward)
- ⁶¹ Cohen, GWAPS, Summary Report, 152.
- ⁶² Rick Atkinson, Crusade: The Untold Story of the Persian Gulf War, (New York: Houghton Mifflin Co., 1993) 338.
- ⁶³ Ibid., 219.
- ⁶⁴ Michael R. Gordon and General Bernard E. Trainor, The General's War: The Inside Story of the Conflict in the Gulf, (Boston: Little, Brown, and Company, 1995), 309.
- ⁶⁵ Hunter, Joint Operational Targeting, 73.
- ⁶⁶ Scales, Certain Victory, 180 -181.
- ⁶⁷ Winnefeld, A League of Airmen 84.
- ⁶⁸ Mann, Thunder and Lightning, 58.
- ⁶⁹ Michael Moeller, The Sum of Their Fears: The Relationship between the Joint Target Coordination Board and the Joint Force Commander, (Maxwell AFB, AL: School of Advanced Airpower Studies, 1995). 27.

⁷⁰ Mann, Thunder and Lightning, 58.

⁷¹ Gordon and Trainor, General's War, 503.

⁷² Ibid., 321.

⁷³ Ibid., 503.

⁷⁴ Mann, Thunder and Lightning, 76.

⁷⁵ Waller complained that Glosson would use a very small briefing board when he briefed the CINC. This way, only Schwarzkopf and a few other senior officers could see what Glosson was talking about. Waller felt this was done specifically to sway the CINC into "buying" the Air Force strategy. See Gordon and Trainor, General's War, 321.

⁷⁶ Gordon and Trainor, General's War, 327.

⁷⁷ RF-4C's were recce-modified (photographic) F-4s that have since left the Air Force inventory. This information on the Air Force not offering them up to the other services comes from Scales, Certain Victory, 177.

⁷⁸ Richard M. Swain, "Lucky War." Third Army in Desert Storm, (Ft Leavenworth, KS: US Army Command and General Staff College Press, 1991), 182.

⁷⁹ Cohen, GWAPS, Vol II, 268.

⁸⁰ JP 3-0, Doctrine for Joint Operations, 2 Feb 1995, III-26. JP 3-56.1, Command and Control of Joint Air Operations, 14 Nov 1994, IV-2.

⁸¹ JP 5-00.2, Joint Task Force Planning Guide and Procedures, 9 Jan 1991, D-A-2.

⁸² JP 1-02, DoD Dictionary of Military and Associated Terms, 23 Mar 1994, 207. JP 3-0, Doctrine for Joint Operations; 2 Feb 1995, III-26. JP 3-56.1, Command and Control of Joint Air Operations, 14 Nov 1994, IV-2. JP 3-04.1, JTTP for Joint Suppression of Enemy Air Defense, 3 Dec 1993, II-2. JP 5-00.2, Joint Task Force Planning Guide and Procedures, 9 Jan 1991, D-A-2.

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